Sheet

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031

U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE duction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Supplement 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

	Col	Complete if Known			
	Application Number	09/650,851			
	Filing Date	08/29/2000			
	First Named Inventor	Mandeep Singh Chadha			
	Art Unit	2634			
	Examiner Name	Shuwang Liu			
_	Attomey Docket Number	M. CHADHA 1-1-1-1			

	U. S. PATENT DOCUMENTS						
Examiner initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (4 Innum)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear		
Su		<sup>US-</sup> 5,732,107	03/24/1998	Phillips, et al.			
1		<sup>US-</sup> 6,208,671	03/27/2001	Paulos, et al.			
		us- 6,628,738	09/30/2003	Peeters, et al.	CEIVED		
		<sup>US-</sup> 6,389,064	05/14/2002	Dholakia, et al.			
		<sup>US-</sup> 5,748,126	05/05/1998	Ma, et al.	UN 0 9 2004		
		<sup>US-</sup> 5,351,087	09/27/1994	Christopher, et al.			
		<sup>US-</sup> 6,240,128 B1	05/29/2001	Banerjea, et al.   CCNI	ology Center 2600		
		<sup>US-</sup> 5,418,849	05/23/1995	Cannalire, et al.			
		<sup>US-</sup> 5,353,279	10/04/1994	Koyama			
		<sup>US-</sup> 4,924,492	05/08/1990	Gitlin, et al.			
		<sup>US-</sup> 5,841,809	11/24/1998	Koizumi, et al.			
		<sup>US-</sup> 5,396,517	03/07/1995	Yedid, et al.			
		US- 4,707,824	11/17/1987	Kanemasa			
		<sup>US-</sup> 5,610,909	03/11/1997	Shaw			
		US- 5,631,899	05/20/1997	Duttweiler			
		us- 5,668,794	09/16/1997	McCaslin, et al.			
		<sup>US-</sup> 5,926,505	07/20/1999	Long	,		
		<sup>US-</sup> 6,532,289	03/11/2003	Magid			
5		<sup>US-</sup> 6,597,787	07/22/2003	Lindgren, et al.			

	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Cite Foreign Patent Document Publication Date	Publication	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages Or Relevant Figures Appear			
			MM-DD-YYYY			Τ*		
						L		
	<u> </u>				<u></u>	L		
	ł				1			

Examiner Signature	(/ 1 7)	Date	
	> an viz co	Considered	1/16/04
· CVATINED.		200 00 11	

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant. 'Applicant's unique citation designation number (optional). <sup>2</sup> See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 801.04. <sup>3</sup> Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). <sup>4</sup> For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. <sup>5</sup>Kind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. <sup>6</sup>Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

06/08/2004 LUDNDINI 00000029 09650851

PTO/SB/08A (08-03) Approved for use through 07/31/2006. OMB 0651-0031 U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE

of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.

Inder the Paperwork Reduction PADE Substitute for form 1449/PTO

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Complete if Known				
Application Number	09/650,851			
Filing Date	08/29/2000			
First Named Inventor	Mandeep Singh Chadha			
Art Unit	2634			
Examiner Name	Shuwang Liu			
Attorney Docket Number	M CHADHA 1-1-1-1			

			U. S. PATEN	T DOCUMENTS	
Examiner Initials*	Cite No.1	Document Number  Number-Kind Code <sup>2 (f Incom)</sup>	Publication Date MM-DD-YYYY	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages or Relevant Figures Appear
En	<u> </u>	<sup>US-</sup> 6,526,139	02/25/2003	Rousell, et al.	
		US-			DECEMEN
		ŲS-			RECEIVED
		US-			
		US-			JUN 0 9 2004
		US-			Technology Center 2600
		US-			reciniology Center 2000
		US-			
		US-			
		U\$-			
		US-			
		US-			
		US-			
		U\$-			
		US-			

<del></del>	FOREIGN PATENT DOCUMENTS							
Examiner Initials*	Cite No.	Foreign Patent Document	Publication Date	Name of Patentee or Applicant of Cited Document	Pages, Columns, Lines, Where Relevant Passages			
			WW-DD-YYYY	,,	Or Relevant Figures Appear	τ°		
	ļ					_		
·	<u> </u>					┢		
					<u> </u>			

Examiner Signature	5 Coorang	Z	Date Considered	11/16/04

\*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered, include copy of this form with next communication to applicant. Applicant's unique citation designation number (optional). See Kinds Codes of USPTO Patent Documents at <a href="https://www.uspto.gov">www.uspto.gov</a> or MPEP 901.04. Enter Office that issued the document, by the two-letter code (WIPO Standard ST.3). For Japanese patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. Mind of document by the appropriate symbols as indicated on the document under WIPO Standard ST.16 if possible. Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

PTC/SB/08B (08-03)
Approved for use through 07/31/2006. OMB 0651-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number. Complete if Known **Application Number** 09/650,851 INFORMATION DISCLOSURE **Filing Date** 08/29/2000 STATEMENT BY APPLICANT First Named Inventor Mandeep Singh Chadh Art Unit (Use as many sheets as necessary) **Examiner Name** Shuwang Liu Attorney Docket Number M. CHADHA 1-1-1- Technology Center 2600 Sheet 3

Examiner Initials*	Cite No.1	Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of the item (book, magazine, journal, serial, symposium, catalog, etc.), date, page(s), volume-issue number(s), publisher, city and/or country where published.	T²
En		Floyd M. Gardner "Interpolation in Digital Modems - Part I: Fundamentals" IEEE Transactoins on Communications, Vol. 41, No. 3, March 1993; pp. 501-507	
1		Lars Erup, et al. "Interpolation in Digital Modems - Part II: Implementation and Performance" IEEE Transactions on Communications, Vol. 41, No. 6, June 1993; pp. 998-1008	
		James. D. Barnette, et al.; U.S. Patent Application Serial No. 09/652,116, filed 08/29/2000 entitled "Resampler for a bit Pump and Method of Resampling a Signal Associated Therewith"; pp. 1-59; 6 drawing sheets	
		Mandeep Singh Chadha, et al.; U.S. Patent Application Serial No. 09/650,854, filed 08/29/2000 entitled "Separation Circuit for an Echo Canceling System and Method of Operating the Same"; pp. 1-67; 6 drawing sheets	
		Mandeep Singh Chadha, et al.; U.S. Patent Application Serial No. 09/650,853, filed 08/29/2000 entitled "Echo Canceling System for a Bit Pump and Method of Opearting the Same"; pp. 1-60; 5 drawing sheets	
مد		James D. Barnette; U.S. Patent Application Serial No. 09/650,850, filed 08/29/2000 entitled "An Interpolator, a Resampler Employing the Interpolator and Method of Interpolating a Signal Associated Therewilh"; pp. 1-78; 6 drawing sheets	

Examiner		Date	, .
Signature	Sharkary Ti	Considered	11/16/04

<sup>&</sup>quot;EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

considered. Include copy of this form with next communication to applicants to place a check mark here if English language Translation is attached.

1 Applicant's unique citation designation number (optional). 2 Applicant is to place a check mark here if English language Translation is attached.

This collection of information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO:

Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.